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0.0: REVISIONS NOTICES

2024-06-18: Updated exploded view including part descriptions list in 11.0. Reworked the installation bolt pattern in 4.1-4.4.

2023-05-29: Fixing exploded views, installation, and operation.

2023-04-27: Document creation.

1.0: SAFETY PRECAUTIONS



CAUTION

- The equipment described in this manual is covered with fix panel (only opened with a tool) that provide protection from electrical components and most of mechanical motions. However, there is four (4) belts that can be exposed to the user. ALWAYS turn OFF the machine before approaching hands from every motion part to remove a jam, service or clean the machine. Go against this notice can result in a severe injury or death;
- Special attention made to ensure that the operation of the machine is safe and convenient without compromising the efficiency. Keeps hands away from the mechanism that break the clips apart. Keeps hands and clothes away from the working area of the machine;
- Keep hands away from the working machine. Do not force through remaining gaps;
- If the system is linked to another machine or install onto another machine. Lock the electrical box of the other machines before performing any maintenance on this equipment. Please refer to the local regulations and laws on locking out machinery. Go against this notice can result in a severe injury or death;
- When working on the electrical components. Disconnect the equipment at the source and use a lockout device to avoid any risk of danger. Make sure you also have the space required to complete the work to avoid any risk of danger.
- Any modifications with any aspect of the mechanical, safety, electrical design, design, or any parts connected with the equipment will void the warranty and liability of KLR Systems. If a change is required, contact KLR Systems for approval. All technical handling must be done by a qualified technician or by KLR Systems;
- KLR is not responsible for any abuse, mishandling, misuse, improper maintenance and repair by owners and users;
- Equipment must be supervised when operating;

Continue the next page...



CAUTION

- Safety switches: DO NOT bypass any safety components for any reason. Violation will void all warranties and responsibility from KLR Systems. If a safety component is broken, it must be replaced before starting the machine;
- Safety panel (fix panel) or safety doors: As a safety, component does not try to remove or unscrew them unless it is necessary for a maintenance operation. If it is the only option, use a lockout device during this procedure and reassemble every single piece as it was when finished;
- When the machine is set to interlock mod, that means the KLR.950 run command and speed is controlled by another equipment. Careful when handling the equipment because it may start when you do not expect it. ALWAYS keep hand away from belts and mechanisms even when the machine is stopped.

KLR.971

Serial numbers: 2341 – beyond

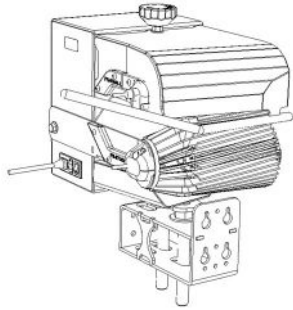
KLR-00001 - beyond

2.0: IDENTIFICATION

2.1: The product brand and type designation

KLR.971

Bag tensioner



*The machine in the picture is a left version

2.2: Version of product

Serial number: located on top of the power supply plug.

2.3: Manufacturer contact

KLR SYSTEMS INC. Packaging equipment manufacturer

Address: 944 rue des Hérons,

City, province, country: Saint-Pie, Québec, Canada

Zip code: J0H 1W0

Phone number: 450-388-0404

Info@klrsystems.com

<https://www.klrsystems.com/>

2.3.1: Contact for technical support

450-388-0404

support@klrsystems.com

<https://www.klrsystems.com/support>

3.0: PRODUCT SPECIFICATION

3.1: Range of applications intended use and general functions

The bag closer KLR.950 is designed to close bag tail with plastic clip. The machine tells the user whenever clip is running out. These following values are in the prototype version and are subject to change:

- Speed in between 50 and 60 package a minute.
- Made of stainless steel 304.
- Ambidextrous machine (left or right).

3.2: Dimensions (for transport)

Height: 19 inches; Length: 16 inches; Width: 16 inches

3.3: Specification for electricity and air

This machine is intended to use these 2 possible specifications:

Electrical need: Access within 5 feet from the machine

- 120 Volts – 5 Amps – 1 Phase – 50 / 60 Hertz
- 220 Volts – 5 Amps – 1 Phase – 50 / 60 Hertz

Need a 3 pins female jack power cord adapter 18AWG. Provided in the packaging with the machine:

120v = PE-01531-15-5P-6

220v = Contact service for part number



In case of loss, order from KLR to get a new one and be sure to have the cord as per requirement for your machine.

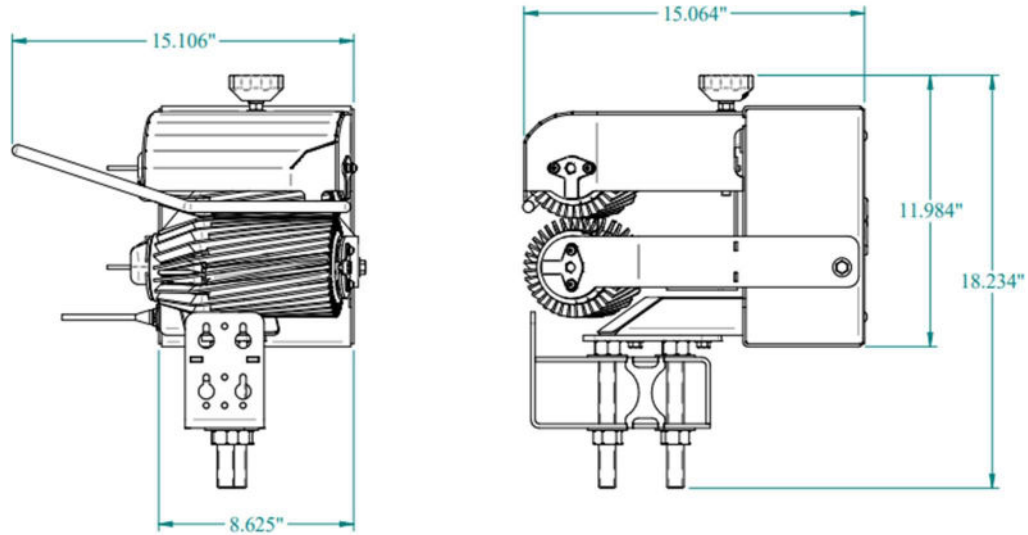
Pneumatic need: None.

4.0: INSTALLATION

4.1: Minimum space required

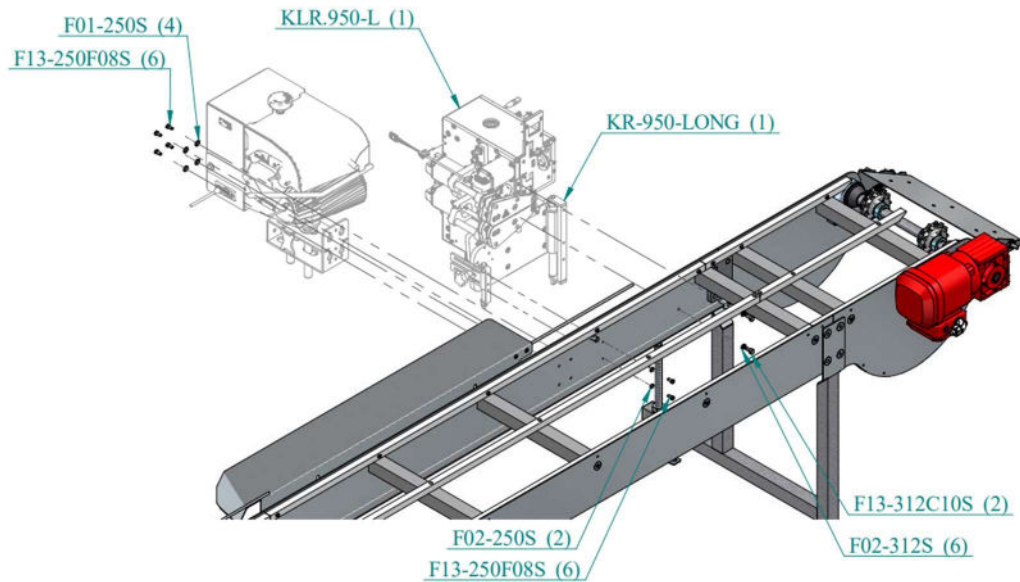
4.1.1: Stand alone

Minimal space required to install this equipment. Here are the overall dimensions of the KLR.950 alone:



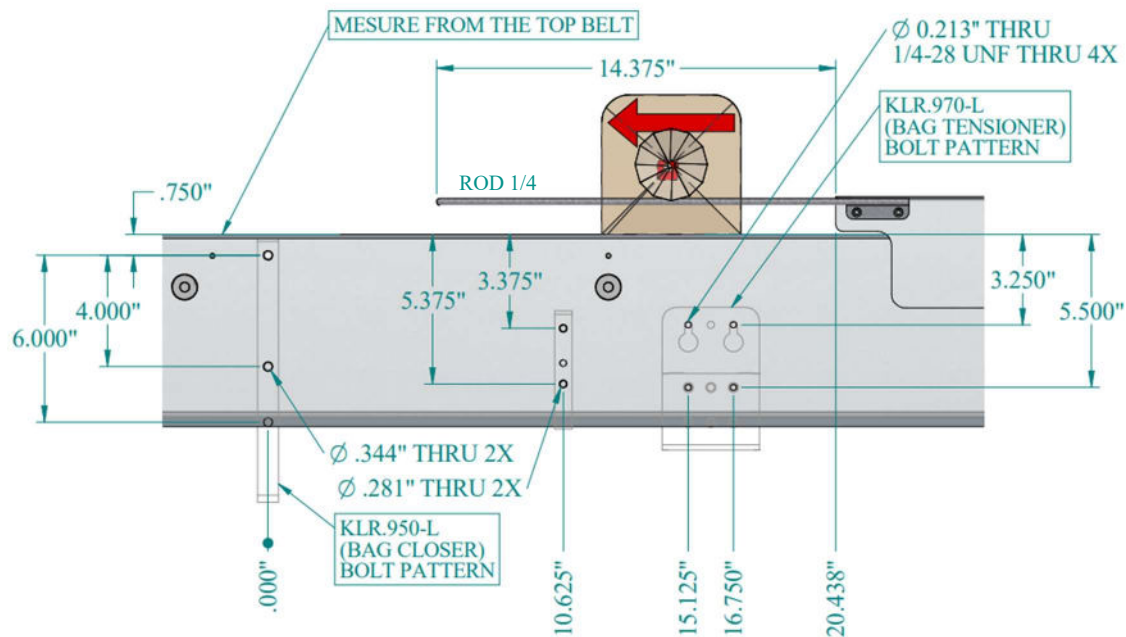
4.2: Screwed from inside the conveyor

4.2.1: Part numbers



4.2.2: Bolt pattern

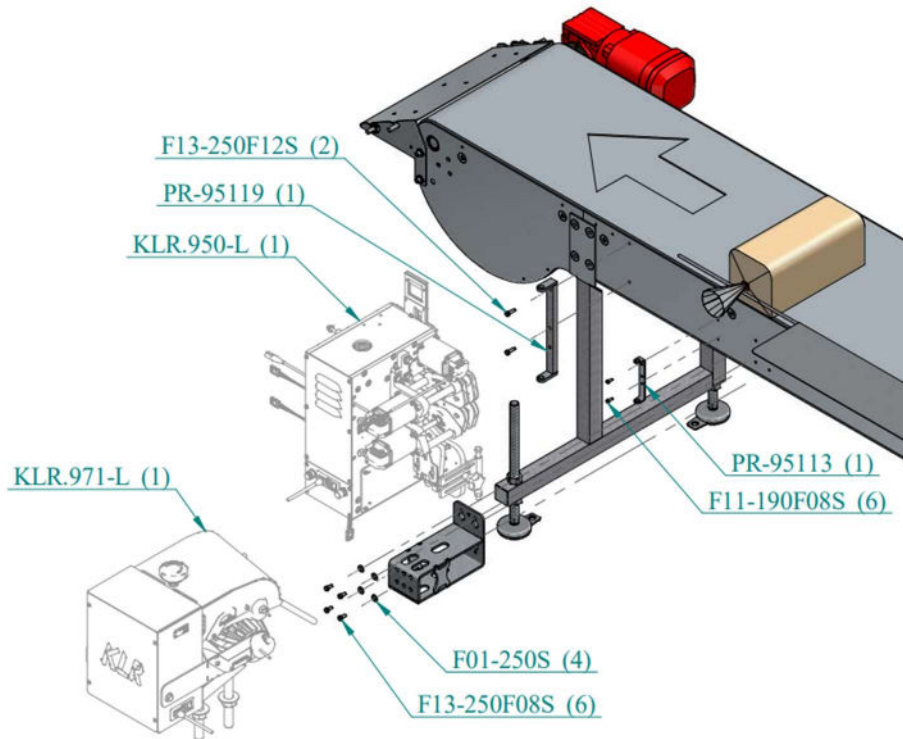
The following bolt pattern is left-handed. Mirror these measures for a right-handed installation.



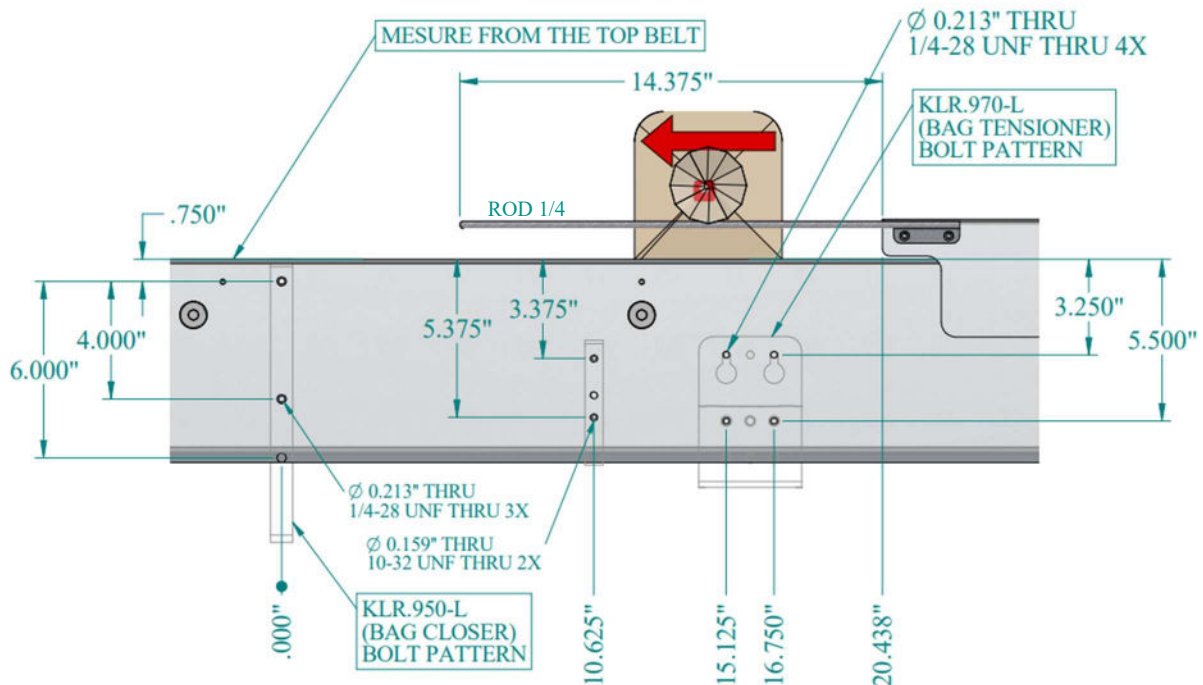
4.3: Standard thread in the conveyor

See 4.3 for metric measures

4.3.1: Part numbers

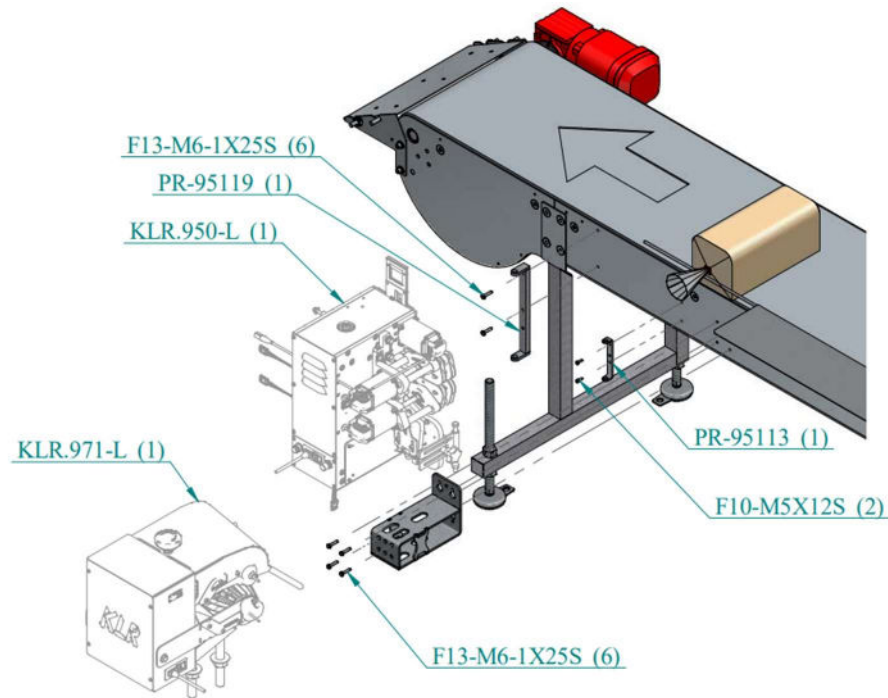


4.3.2: Bolt pattern

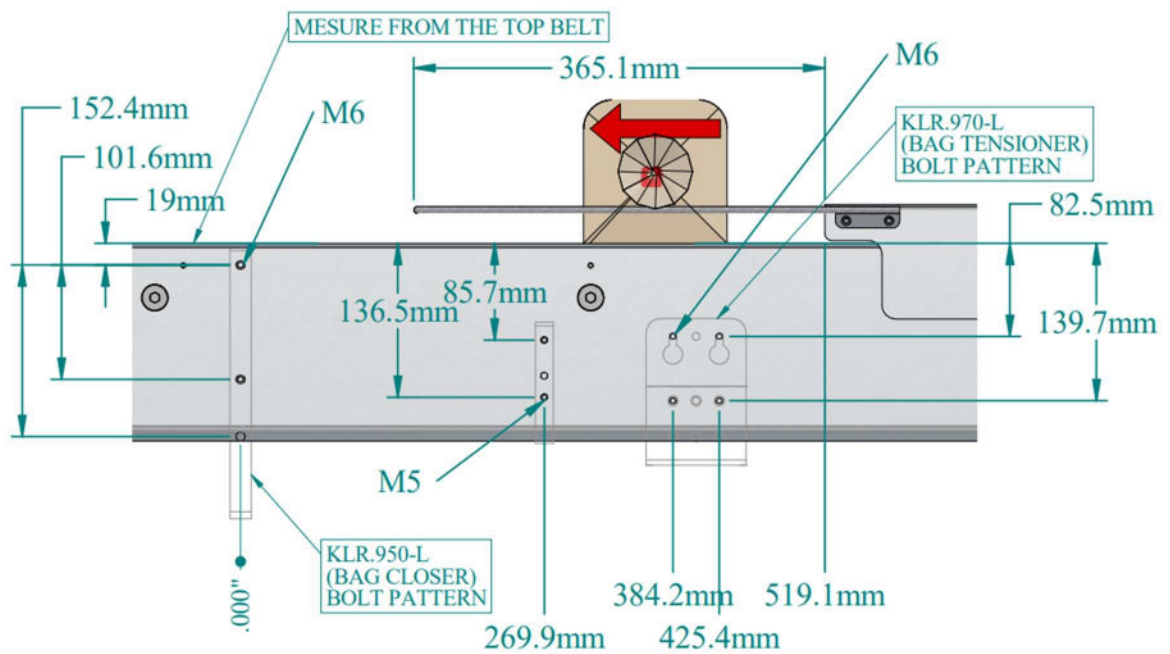


4.4: Metric thread in the conveyor

4.4.1: Part numbers

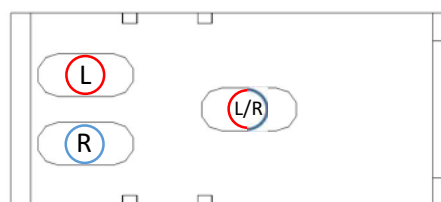


4.4.2: Metric bolt pattern



4.5: Position on the bracket

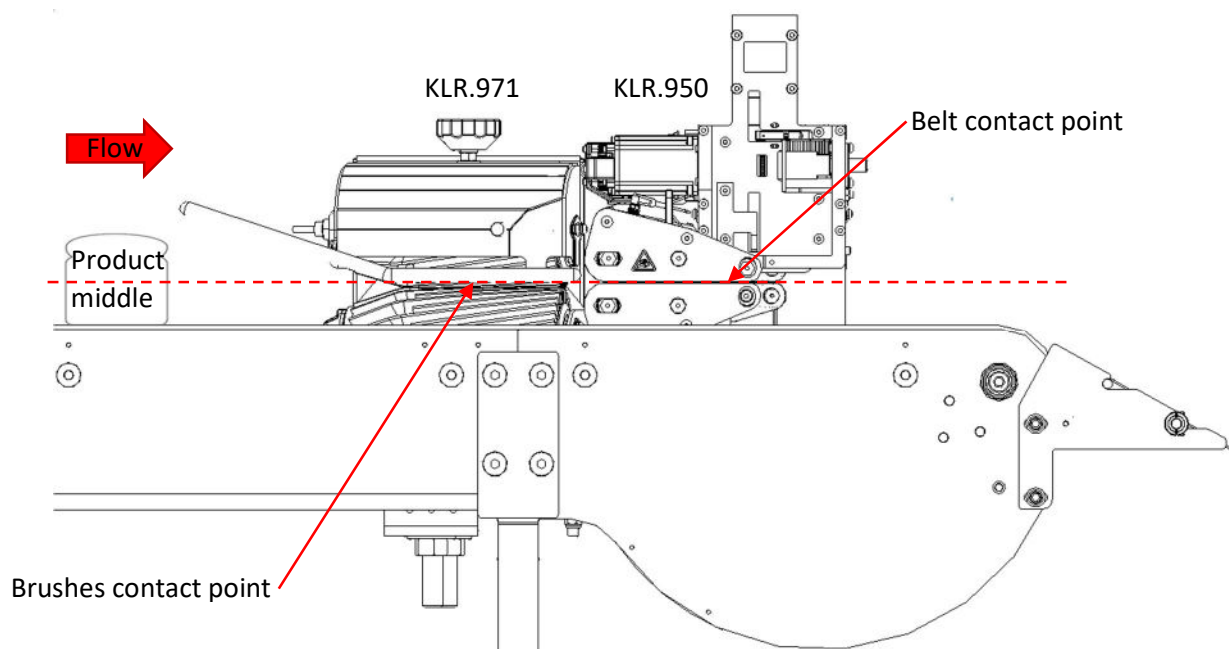
Use the correct set of holes according to the hand version of the machine.



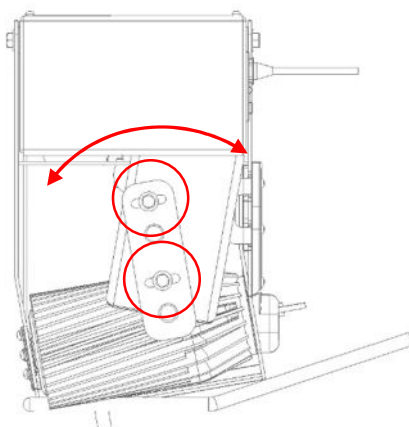
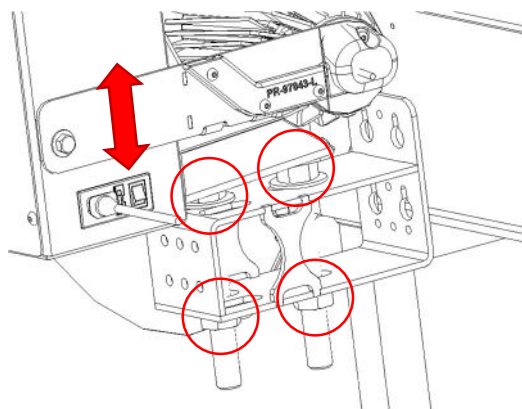
Conveyor side

4.6: Height adjustment

These 3 things should be equal: Middle of the product, the brushes contact point of the KLR.971 and the belt contact point of the belt of the KLR.950. Of course, all products that are going to run on the line are not necessarily the same height, use an average for all of them.



Use the combination of the 4 nuts to adjust the height. Adjust the orientation with the two screws from underneath.

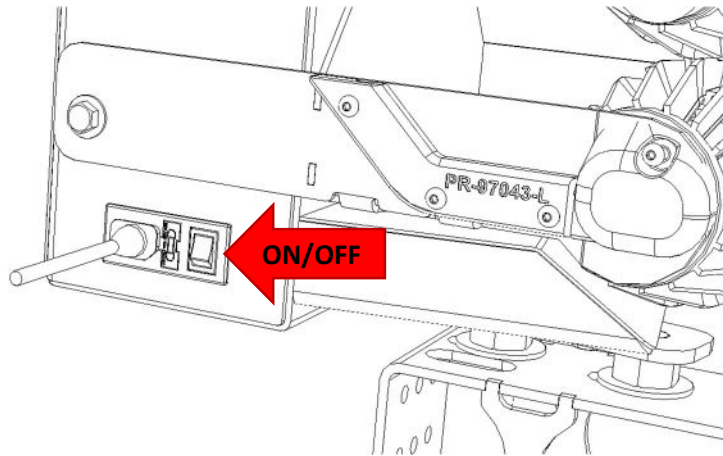


5.0: OPERATION

	➤ Before using the machine, it is important that every operator of the machine and maintenance personnel take part in a training session given by KLR systems technicians.
 CAUTION	➤ ALWAYS turn OFF and UNPLUG the equipment before any maintenance procedures, cleaning, removing a jam or any other tasks that could hurt the user if the machine start promptly.
	➤ DO NOT leave the unit ON for an extended period without operating it.

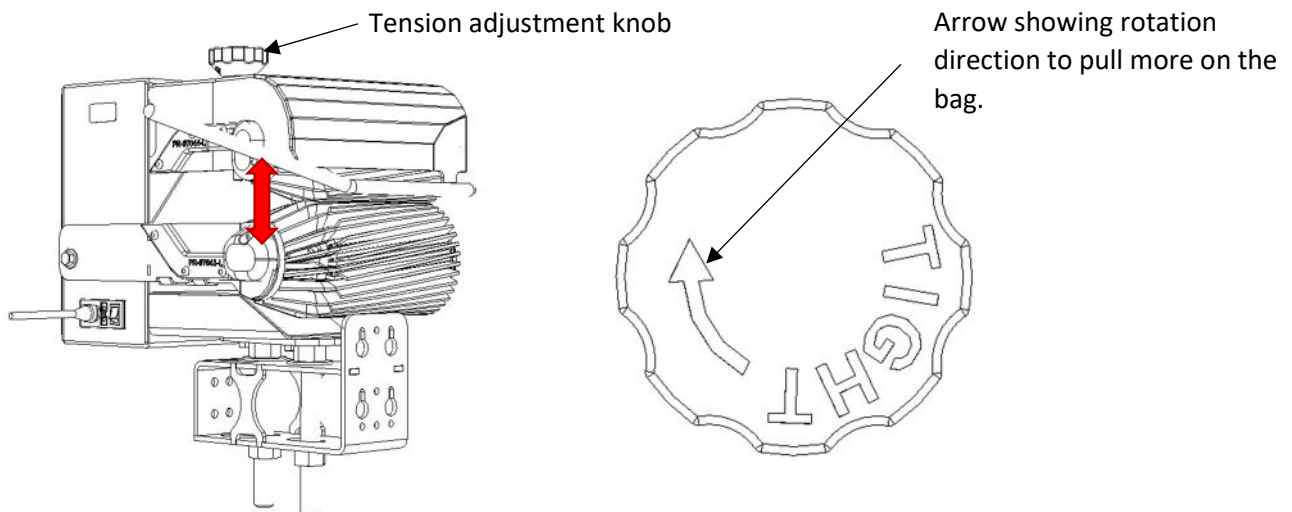
5.1: Turning ON and OFF the machine

In the back off the machine, there is the main power switch. Turn OFF to remove any energy in the machine.



5.1.1: Tension adjustment knob

Use the tension adjustment knob on top to properly flatten the bag prior the closure.



6.0: MAINTENANCE AND CLEANING

6.1: Preventive maintenance schedule

Here is a quick way to take care of your machine by a preventive maintenance schedule. Due to the complexity of our machine, take note that these procedures are only advices and are subject to change. These time intervals will change according to the usage of the machine:

PREVENTIVE MAINTENANCE SCHEDULE			
Location	Procedure	Time interval	Remarks
Brushes	Check bearing / replace when required (PM-00106)	Quarterly (3 months)	None
	Remove any built-up of crumbs and dust inside the unit and make sure nothing blocking the way of the bag tails	Weekly / monthly	None

6.2.9: Cleaning

Cleaning must be done weekly or monthly, adjust if needed.

- Use air blowers to get rid of the dust;

7.0: MAINTENANCE AND REPARATIONS BY TECHNICIANS FROM KLR SYSTEMS INC.

7.1: Contact information for service technicians

KLR SYSTEMS INC.

944 Herons street

SAINT-PIE, QUÉBEC, CANADA

JOH 1LO

450-388-0404

Info@klrsystems.com

<https://www.klrsystems.com/>

7.2: Contact information for technical support

450-388-0404

support@klrsystems.com

<https://www.klrsystems.com/support>

8.0: LISTS OF SPARE PARTS AND CONSUMABLES

8.1: Spare parts list KLR.971

Suggested spare part list per machine for KLR.971-L (R)

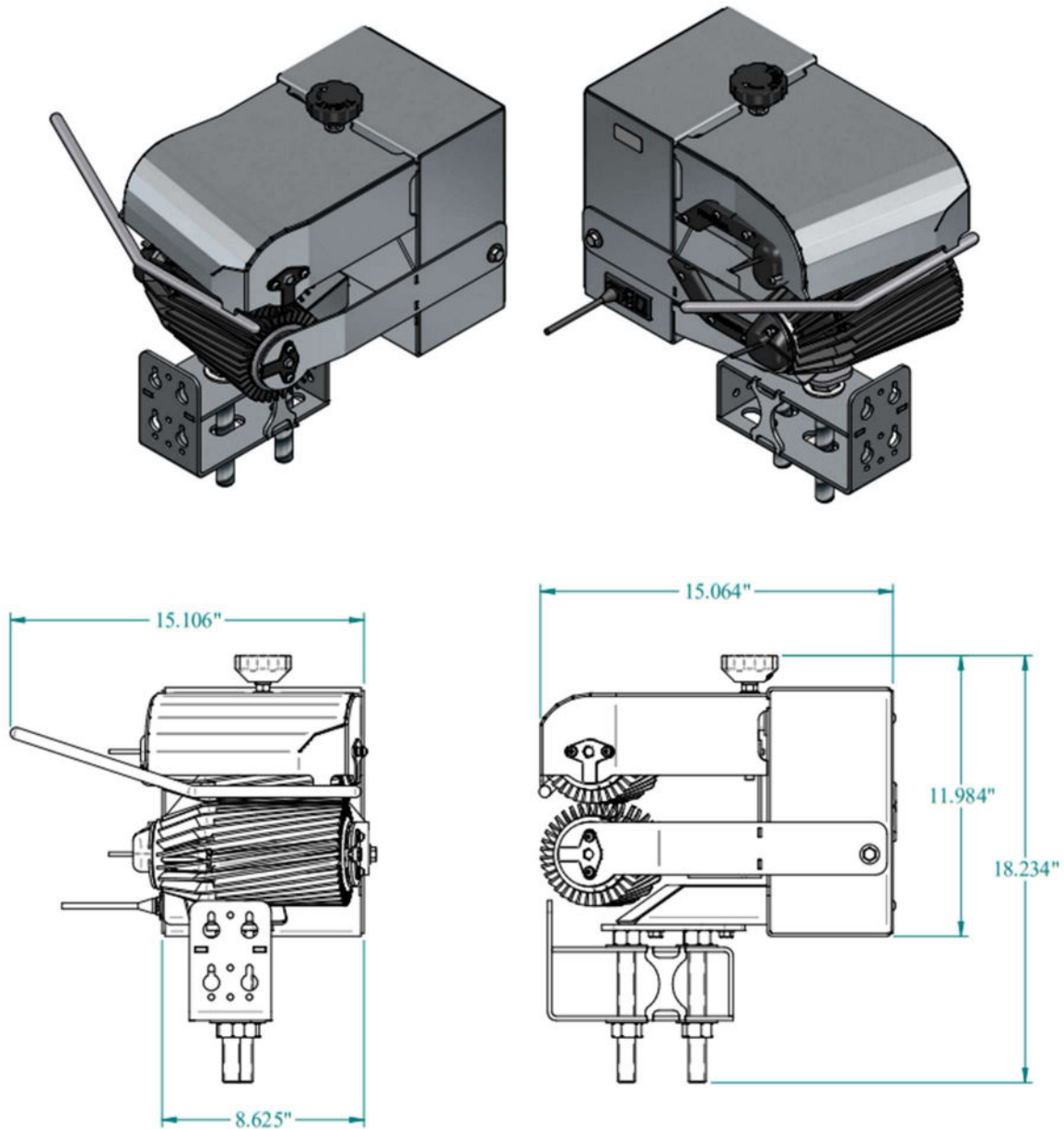
Numbers	Part numbers	Quantity	Descriptions
1	PE-00216-4	5	GLASS FUSE 4A
2	PE-00222	5	FUSE 4A
3	PM-00106	2	BEARING
4	PR-97052	1	TENSION ADJUSTMENT KNOB
5	PR-97062	2	BRUSH HOLDER
6	PE-00829	1	INTERROLL DRIVE

10.0: DECOMMISSIONING OF THE PRODUCT

It is advisable to plan a tour of KLR to reinstall the equipment after a prolonged deactivation or a move, destruction, recycling, disposal.

11.0: EXPLODED VIEWS

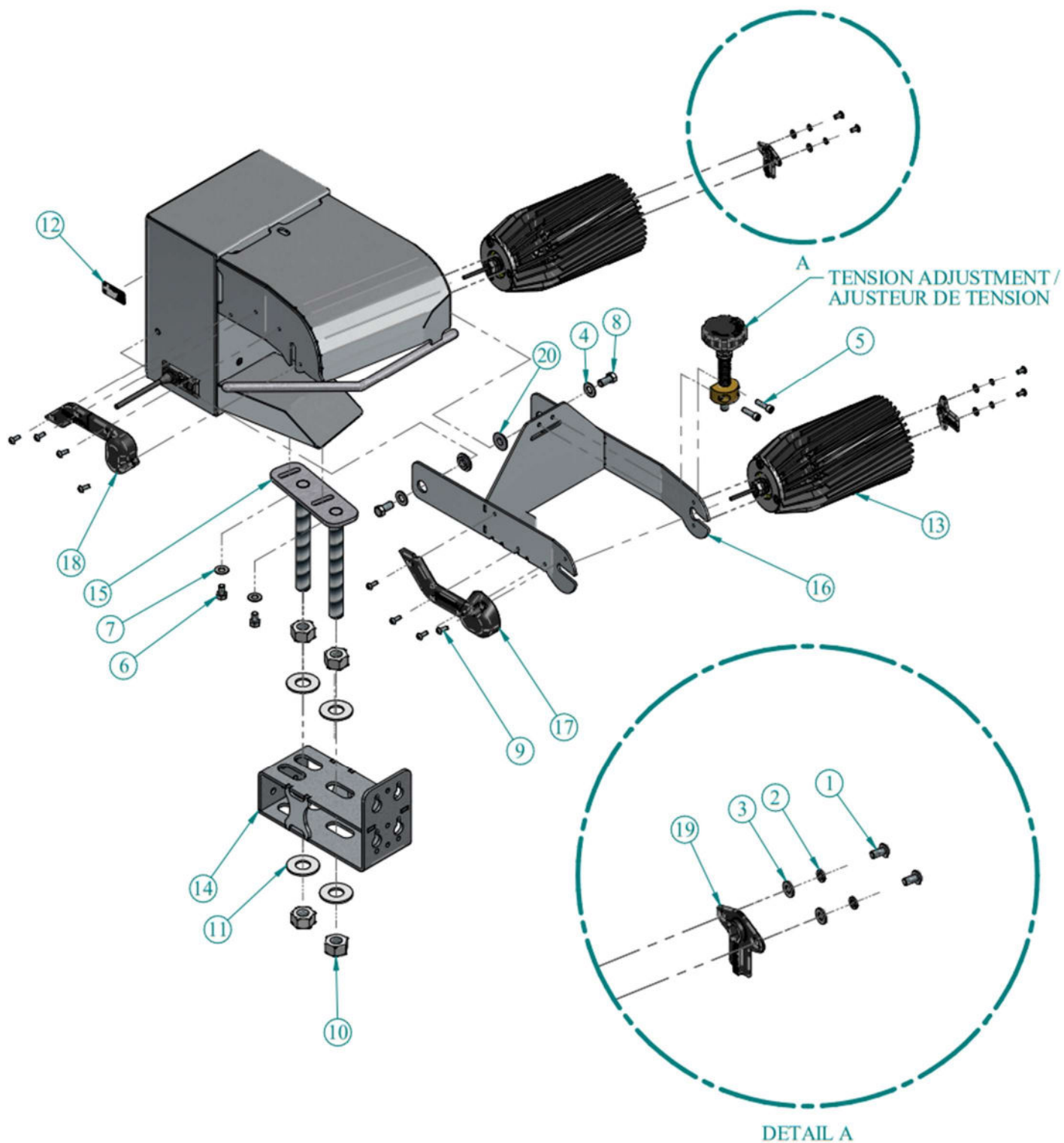
KLR.971-L



11.1: Main assembly



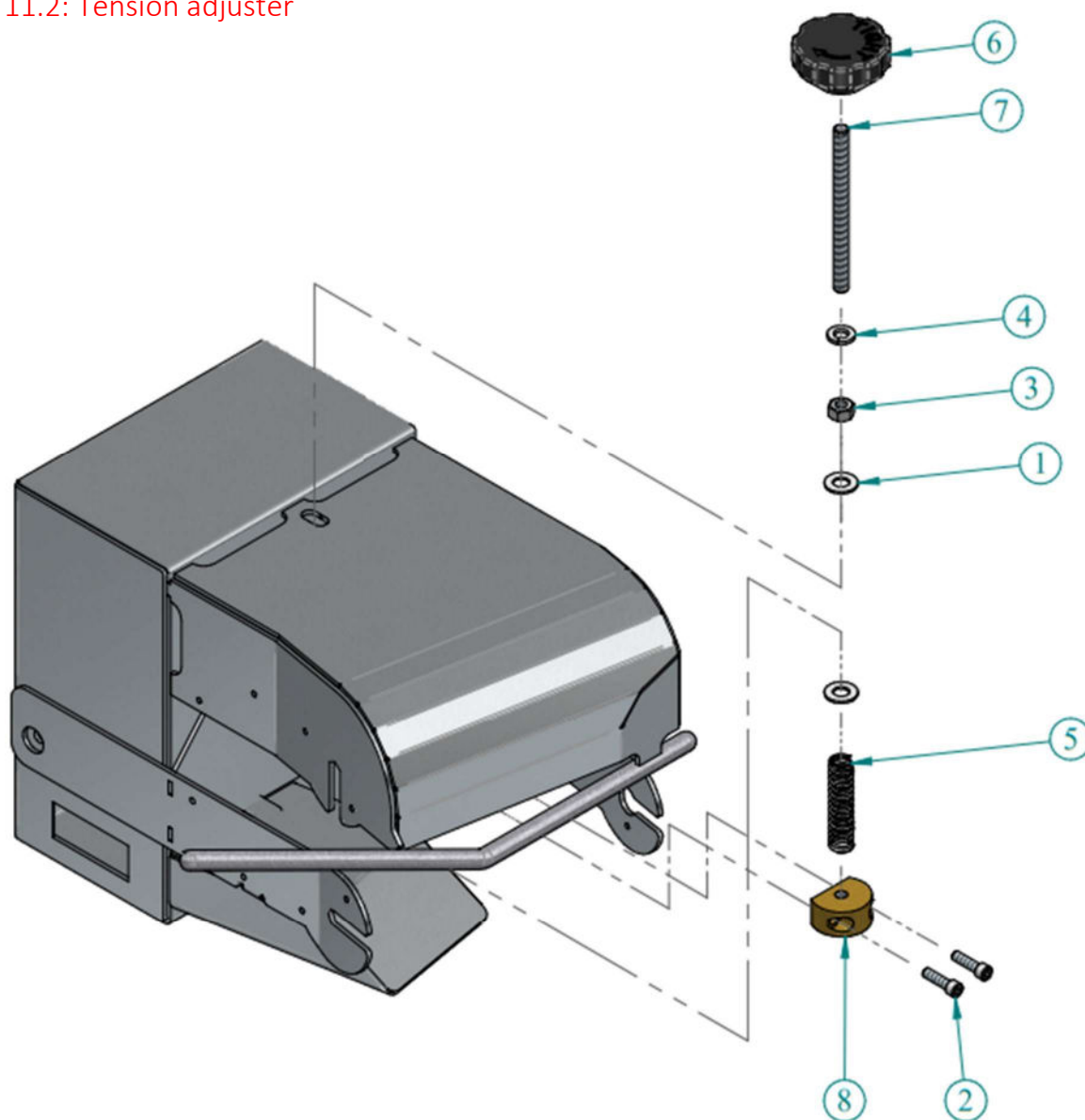
This manual shows **Left** version of the machine. On part orders for a **Right** version, the parts are ambidextrous unless letter L is present in the part numbers. Simply order R variant when needed (ex: PR-01234-L -> PR-01234-R).



11.1.1: Main assembly parts list

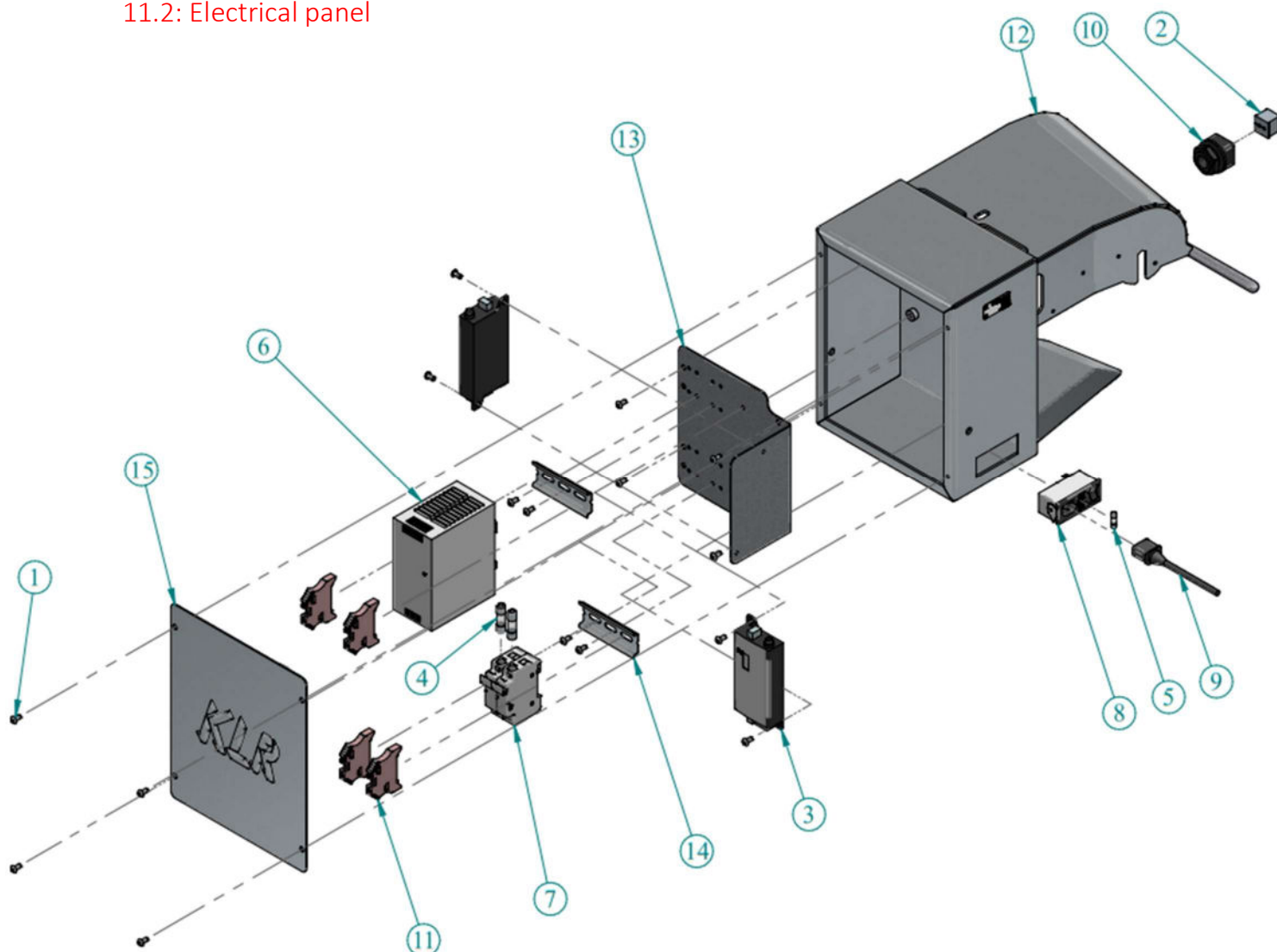
KLR.971-L			
No.	Part number	Qty	Title
1	F11-190C06S	4	BUTTON HEAD 10-24 X 3/8 STAINLESS
2	F02-190S	5	LOCK WASHER #10 STAINLESS
3	F01-190S	5	FLAT WASHER #10 STAINLESS
4	F01-375S	4	FLAT WASHER 3/8" STAINLESS
5	F10-250F14S	2	SOCKET CAP 1/4-28 X 7/8" STAINLESS
6	F13-312C08S	2	HEX HEAD 5/16-18 X 1/2 STAINLESS
7	F01-312S	2	FLAT WASHER 5/16 STAINLESS
8	F13-375F12S	2	HEX HEAD 3/8-24 X 3/4" STAINLESS
9	F11-190C08S	8	BUTTON HEAD 10-24 X 1/2 STAINLESS
10	F03-750CS	4	NUT HEX 3/4 -10 STAINLESS
11	F01-750S	4	FLAT WASHER 3/4" STAINLESS
12	LABEL.971-QR.0	1	LABEL KLR.971 QR CODE
13	KR-971-BRUSH	2	BRUSH ASSEMBLY
14	PR-97007-V2	1	BRUSH FIXATION BLOCK
15	PR-97053	1	AJUSTEMENT FIXTURE
16	PR-97046-L	1	BRUSH SUPPORT DOWN ASS LEFT
17	PR-97043-L	1	WIRE COVER LOWER LEFT
18	PR-97044-L	1	WIRE COVER UPPER LEFT
19	PR-97062	2	AXLE BRACKET
20	PR-97061	2	SPACER

11.2: Tension adjuster



KLR.971-L			
No.	Part number	Qty	Title
1	F01-375S	2	FLAT WASHER 3/8" STAINLESS
2	F10-250F14S	2	SOCKET CAP 1/4-28 X 7/8" STAINLESS
3	F03-375CS	1	NUT 3/8-16 STAINLESS
4	F02-375S	1	LOCK WASHER 3/8" STAINLESS
5	PM-01564	1	SPRING - L 2-1/2"
6	PR-97052	1	HANDLE
7	PR-97047	1	THREADED ROD
8	PR-97030	1	THREADED BRASS

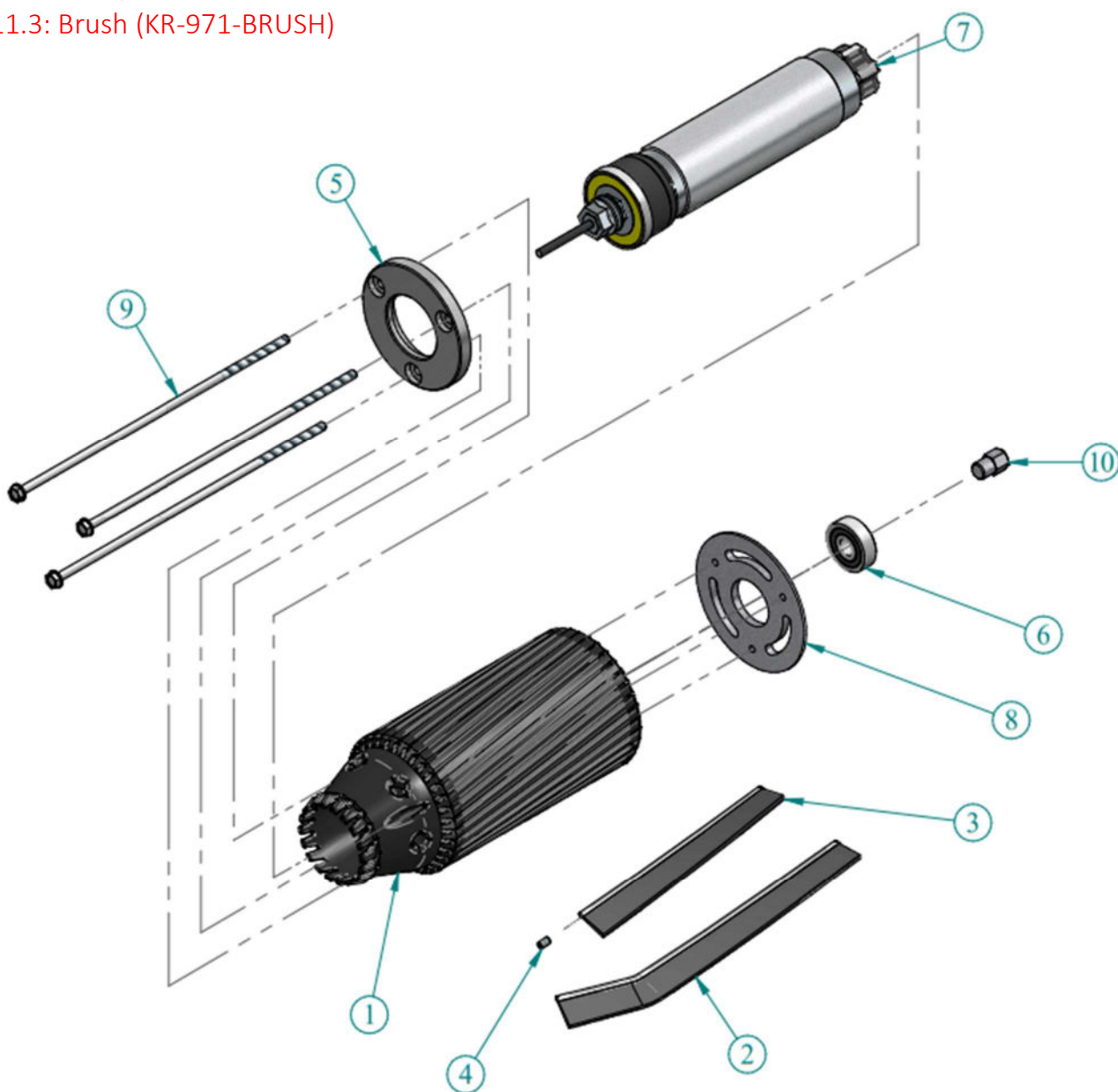
11.2: Electrical panel



KLR.971-L

No.	Part number	Qty	Title
1	F11-190F06S	16	BUTTON HEAD 10-32 x 3/8 STAINLESS
2	PF-39906	1	CABLE GROMMET 2 X 4 mm IP54
3	pe-00829	2	DRIVECONTROL
4	PE-00222	2	FUSIBLE SLOW BLOW HRC 600V 4A
5	PE-00217	1	FUSE, GLASS 5x20MM - 5 A
6	PE-00700-10	1	POWER SUPPLY PRO ECO 240W 24V 10A - 120/240V
7	PE-00706-2	1	FUSE HOLDER CARTRIDGE 2 POLES 30A DIN RAIL
8	PE-01530	1	POWER ENTRY WITH SWITCH IEC320-C14 - CSA/UL/CE 115/240V
9	PE-01531-15-5P-6	1	POWER CORD 18AWG NEMA5-15P
10	PF-45025	1	SQUARE INSERT SPLIT CABLE GLAND IP54
11	PE-08026	4	STOPPER WEW 35/2 WM BG BEIGE V2
12	PR-97045-L	1	BRUSH MAIN FRAME LEFT
13	PR-97060	1	ELECTRIC BACK PLATE
14	PR-97026	2	DIN RAIL
15	PR-97031-01	1	ELECTRICAL PANEL COVER

11.3: Brush (KR-971-BRUSH)



KR-971-BRUSH

No.	Part number	Qty	Title
1	PR-97040	1	BRUSH SUPPORT
2	PM-03228-7.812	18	LONG BRUSH
3	PM-03228-5.375	18	SHORT BRUSH
4	F06-164C04S	18	SET SCREW 8-32 X 1/4" STAINLESS
5	PR-97041	1	BRUSH CAP
6	PM-00106	1	BEARING
7	PR-06784	1	MODIFIED MOTOR INTERROLL EC5000
8	PR-97037	1	BRUSH CAP #2
9	F13-190F130	3	HEX HEAD 10-32 X 8-1/8"
10	PR-97063	1	AXLE

12:0 ELECTRICAL PLAN

